AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims:

1.   (Currently Amended) A method to monitor <u>localization</u> localisation, posture, movement or properties of one or several objects [[(O)]] to be monitored, such as human body, animal or robot in an environment to be monitored, such as in apartment, public space, industrial or office space or in an animal shelter characterized in that <u>wherein</u> in some area of the environment to be monitored, for example in a floor, wall, or ceiling there is a transducer (TRANSDUCER MATRIX) which is composed [[from]] <u>of</u> a distribution of <u>conductors, which are electrically insulated from the object</u> conductor, such as a matrix of conductors, and said distribution of conductor includes at least the <u>a</u> first division of <u>selectable conductors</u> conductor and [[the]] <u>a</u> second division of <u>selectable conductors, the method comprising the steps of</u> conductor and that a scanning cycle is performed when to the first division of conductor is an excitation signal (HS) connected and the first signal (AS) is derived from a coupling of the excitation signal (HS) between the first and the second divisions of conductor and said signal (AS) includes some information about coupling between the first and the second divisions of conductor

<u>a) selecting the conductors of the first division of conductors and conductors of the second division of conductors and connecting an excitation signal to the selected</u>

first division of conductors and performing a scanning cycle of the selected divisions of the selected conductors when the excitation signal is connected to the first division of the selected conductors;

b) deriving a first signal from a coupling of the excitation signal between the first and the second selected divisions of conductors, and processing said first signal to obtain information about impedance of the object for characterization of the object.

2. (Currently Amended) [[A]] The method according to claim 1 wherein said scanning cycle is repeated by selecting the first or second division of conductors to contain one or several conductors other than the conductors of the first or second division of conductors selected during a previous scanning cycle in respect of other divisions of conductor of the transducer (TRANSDUCER MATRIX).

3. (Currently Amended) [[A]] The method according to claim 1 wherein from said first signal [[(AS)]] one derives [[some]] information about [[some]] essentially internal properties of the object (O) such as electric conductivity and its variations, distributions of tissues in the body, distribution of fluids, function of the heart or respiration.

4.   (Currently Amended) [[A]] The method according to claim 1 wherein from said first signal (AS) some information which is characteristic to the object [[(O)]] is derived,

wherein the information includes such as information about electrical conductivity and variations in that electrical conductivity, and

wherein said information is used in purposes to recognize the object [[(O)]].

5.   (Currently Amended) [[A]] The method according to claim 1 wherein the excitation signal [[(HS)]] evokes [[the]] a second signal [[(IS)]] in a special means [[(EV)]] and the second [[this]] signal is received by a receiving means [[(V)]].

6.   (Currently Amended) [[A]] The method according to [[the]] to claim 5 wherein said second signal [[(IS)]] contains [[some]] information related to the object (O) such as information related to identification or status.

7.   (Currently Amended) [[A]] The method according to claim 5 [[1]] wherein information derived from one or both of said first and second signals (AS, IS) is evaluated using criteria which are either fixed, preset or adaptable and, based on [[the]] results of the evaluation, one performs the method further comprises performing a known action actions, such as control or alarm functions.

8.   (Currently Amended) [[A]] <u>The</u> method according to claim <u>5</u> [[1]] wherein information derived from one or both <u>of</u> said <u>first and second</u> signals (AS, IS) is stored in memory means in order to observe temporal dependence of <u>behavior</u> behaviour of environments to be monitored and of objects (O) for example in such a way that at certain moment registered information which are derived from one or several signals (AS, IS) is stored and this information is used as reference information at later moments derived information.

9.   (Currently Amended) [[A]] <u>The</u> method according to claim <u>5</u> [[1]] wherein information derived from one or both <u>of</u> said <u>first and second</u> signals (AS, IS) is used to adapt a status of artificial intelligence such as an adaptive or self organizing net.

10.   (Currently Amended) An arrangement to monitor <u>localization</u> localisation, posture, movement or properties of one or several objects [[(O)]] to be monitored, such as human body, animal or robot in an environment to be monitored, such as in apartment, public space, industrial or office space or in an animal shelter characterized in that it <u>wherein the arrangement</u> includes<u>:</u>

<u>a)</u> transducer means (TRANSDUCER MATRIX) which is composed <u>of</u> [[from]] a distribution of <u>conductors, which are galvanically isolated from the object, the distribution of conductors</u> conductor including at least [[the]] <u>a</u> first division of <u>selectable</u>

conductors ~~conductor~~ and [[the]] <u>a</u> second division of <u>selectable conductors;</u> ~~conductor and~~

b) means to perform a scanning cycle ~~(CENTRAL UNIT)~~ <u>of the second division of</u> <u>selectable conductors;</u> [[and]]

<u>c)</u> means to generate an excitation signal [[(HS)]] <u>during the scanning cycle;</u> ~~and~~

<u>d)</u> means ~~(MULTIPLEXER)~~ to <u>selectively connect</u> ~~conduct~~ said excitation signal to the first division of <u>selectable conductors</u> ~~conductor~~ of the transducer means<u>;</u> ~~(TRANSDUCER MATRIX) and~~

<u>e)</u> means to derive a <u>first</u> signal [[(AS)]] which is related to a coupling ~~between~~ ~~said first and second divisions of conductor~~ <u>through impedance of the object; and</u>

<u>f) means for detecting changes of the impedance of the object to be monitored</u> <u>for obtaining information about characteristic features of the object to be monitored.</u>

11.   (Currently Amended) [[An]] <u>The</u> arrangement according to claim 10 wherein <u>the arrangement further</u> [[it]] includes <u>a signal processing</u> means ~~(CENTRAL~~ ~~UNIT)~~ to process the <u>first</u> signal [[AS]] from transducer means ~~(TRANSDUCER~~ ~~MATRIX)~~ and to derive information related to properties of the object ~~(O) such as~~ ~~function of the heart, respiration or electric conductivity~~.

12.   (Currently Amended) [[An]] The arrangement according to claim 11 [[10]] wherein [[it]] the signal processing means (CENTRAL UNIT) includes means to transfer information derived from an object forward via the a first transmission path such as via.

13.   (Currently Amended) [[An]] The arrangement according to claim 10 wherein the transducer means (TRANSDUCER MATRIX) include includes components to detect at least two different physical quantities such as electrical coupling and acoustic energy.

14.   (Currently Amended) [[An]] The arrangement according to claim 10 wherein the first signal [[(AS)]] produced by the transducer means (TRANSDUCER MATRIX) is based at least partially on an electric field coupling i.e. capacitive coupling between the object [[(O)]] and the transducer means (TRANSDUCER MATRIX).

15.   (Currently Amended) [[An]] The arrangement according to claim 11 [[10]] wherein the signal processing means (CENTRAL UNIT) include some includes means which are capable of performing to perform some adaptive functions such as neural networks or other means [[or]] of artificial intelligence.

16.   (Currently Amended) [[An]] The arrangement according to claim 10 wherein the arrangement includes or to it there are attached some means to store spatial information related to the transducer means (TRANSDUCER MATRIX).

17.   (Currently Amended) [[An]] The arrangement according to claim 12 [[10]] wherein via the transducer means (TRANSDUCER MATRIX) some information about localization of at least one division of selectable conductors conductor and means to transfer this information is forwarded forward via a second another transmission path such as with the excitation signal (HS) or with a radio signal.

18.   (Currently Amended) [[An]] The arrangement according to claim 10 wherein the arrangement includes a special means [[(EV)]], which generates generate an additional a second signal [[(IS)]] by an effect of the excitation signal [[(HS)]].

19.   (Currently Amended) [[An]] The arrangement according to claim 10 wherein the arrangement [[it]] includes means or to it has been connected means to form a contact via a some other transmission path, such through wired or wireless contact, to be used in receiving or transmitting control information, in receiving or transmitting localization information or receiving or transmitting time information or for other communication with other systems such as with a robot.

20.   (Currently Amended) [[An]] The arrangement according to claim 18 [[10]] wherein information derived from the first signal, the second signal and/or the excitation signal one or several signals (AS, IS, HS) is used to perform [[some]] control functions with some means of the arrangements or with some attached means, these, wherein the control functions [[may]] include controlling [[of]] a robot, lighting, air conditioning, alarm systems, [[or]] announcement systems or controlling of locking.

21.   (Currently Amended) [[An]] The arrangement according to claim 10 in that it wherein the arrangement includes means to derive information characterizing movement of an object (O) such as derive speed distribution of movement or quantities which characterizes that.

22.   (Currently Amended) [[An]] The arrangement according to claim 10 wherein at least one some of the division distributions of selectable conductors conductor of the transducer means (TRANSDUCER MATRIX) are placed near such surfaces, such as a floor, a wall and or a ceiling surface surfaces, on which or near which an object [[(O)]] has [[an]] access.

23.   (Currently Amended) [[An]] The arrangement according claim 10 wherein at least one division a some of the distributions of selectable conductors conductor of

the transducer <u>means</u> (~~TRANSDUCER MATRIX~~) are placed near ~~such~~ surfaces of the environment to be monitored ~~such as in surroundings of dangerous or valuable artifacts~~.

24. (Currently Amended) [[An]] <u>The</u> arrangement according to claim 10 wherein at least <u>one division</u> ~~a some of the distributions~~ of <u>selectable conductors</u> ~~conductor~~ of the transducer <u>means</u> (~~TRANSDUCER MATRIX~~) is realized by using some conductors which are in <u>construction elements of the environment to be monitored</u> ~~constructions such as concrete iron, air-conditioning pipes, water pipes or electric conductors~~.

25. (Currently Amended) [[An]] <u>The</u> arrangement according to claim 18 wherein the special means <u>includes</u> (~~EV) include some~~ means, ~~such as a RFID circuit, a transducer or an active circuit, in order~~ to implement information in <u>the second</u> signal [[(IS)]] generated by the special means.

26. (Currently Amended) [[An]] <u>The</u> arrangement according to claim 18 wherein one or several properties, ~~such as an amplitude or a frequency~~ of the excitation signal [[(HS)]] are different when ~~an~~ <u>the second</u> signal [[(IS)]] generated by the special means [[(EV)]] is evoked referenced to localization of an object [[(O)]].

27.   (New) The method according to claim 1, wherein one or several objects to be monitored include a human body, an animal or a robot.

28.   (New) The method according to claim 1, wherein the environment to be monitored includes a residence, a public space, an industrial space, an office space or an animal shelter.

29.   (New) The method according to claim 1, wherein the area of the environment to be monitored includes a floor, a wall, or a ceiling.

30.   (New) The method according to claim 3, wherein internal properties of the object include an electric conductivity and its variations, a distribution of tissues in a body, a distribution of fluids, or a function of the heart or respiration.

31.   (New) The method according to claim 8, wherein at a certain moment registered information which is derived from the first or second signals is stored and this information is used as reference information for derived information at a later moment.

32.   (New) The arrangement according to claim 10, wherein one or several objects to be monitored include a human body, an animal or a robot.

33.   (New) The arrangement according to claim 10, wherein the environment to be monitored includes a residence, a public space, an industrial space, an office space or an animal shelter.

34.   (New) The arrangement according to claim 11, wherein properties of the object include a function of the heart, respiration or an electric conductivity.

35.   (New) The arrangement according to claim 12, wherein the first transmission path includes a telephone network or a digital television network.

36.   (New) The arrangement according to claim 13, wherein the at least two different physical quantities include electrical coupling and acoustic energy.

37.   (New) The arrangement according to claim 23, wherein the environment to be monitored includes an area surrounding a hazardous substance, an area surrounding a piece of artwork or an area surrounding an artifact.

38.   (New) The arrangement according to claim 24, wherein construction elements include concrete, iron, air conditioning pipes, air conditioning ducts, water pipes or electrical conductors.

Claim 39 (New): The arrangement according to claim 25, wherein the special means includes a RFID circuit, a transducer or an active circuit.